

14 August 2023

## J.P. Morgan ESG GBI-EM UWV Workers' Rights Customized Index

### Methodology and Factsheet

#### Index Criteria

<b>Instrument Type:</b>	Local Currency denominated fixed coupon instruments.
<b>Remaining Maturity:</b>	Only bonds with greater than 6 months to maturity are included in the J.P. Morgan ESG GBI-EM UWV Workers' Rights Customized Index. Bonds with less than 6 months to maturity are removed from the indices at rebalance date.
<b>Amount Outstanding:</b>	Local issues with a current face amount outstanding of \$1 billion or more, as well as Global issues with \$500 million or more are considered for inclusion.
<b>Currency:</b>	All eligible currencies are available within the set of eligible countries.
<b>Country Eligibility:</b>	<p><b>Index Entry:</b> A country's GNI per capita must be below the Index Income Ceiling (IIC)<sup>1</sup> for 3 consecutive years OR its IPR<sup>2</sup> must be below the IPR threshold for 3 consecutive years.</p> <p><b>Index Exit:</b> If a country's GNI per capita is above the Index Income Ceiling (IIC) or IPR, for three consecutive years as well as the country's long term local currency sovereign credit rating (the available ratings from all three agencies: S&amp;P, Moody's &amp; Fitch) is A-/A3/A- (inclusive) or above for three consecutive years.</p>
<b>Capital Controls:</b>	The index excludes countries with explicit capital controls, but does not factor in regulatory/tax hurdles in assessing eligibility, unless such regulatory or tax hurdles significantly hinder investors' ability to replicate the index

#### JESG Overlay Criteria

The J.P. Morgan ESG GBI-EM UWV Worker's Right Customized Index applies the J.P. Morgan JESG methodology as an overlay to the J.P. Morgan GBI-EM UWV Worker's Right Customized Index.

For details on the ESG providers, scoring methodology, green bond treatment and exclusions, please refer to the sovereign methodology detailed within the [J.P. Morgan ESG Index Suite \(JESG\) Rules and Methodology](#).

<sup>1</sup> J.P. Morgan defines the Index Income Ceiling (IIC) as the GNI per capita level that is adjusted every year by the growth rate of the World GNI per capita, Atlas method (current US\$), provided by the World Bank annually.

<sup>2</sup> The IPR is calculated from the one-year lagged GDP data available in IMF's World Economic Outlook publication. The EM IPR threshold is an indexed number which mimics the changes to the World IPR.

<b>ESG providers &amp; Green Bond certification authorities</b>	Sustainalytics Verisk Maplecroft Climate Bonds Initiative
<b>JESG Scoring methodology</b>	A simple average of each country's Verisk Maplecroft and Sustainalytics score is taken to produce the final JESG index score
<b>JESG Integration methodology</b>	The JESG scores are divided into five bands that are used to scale each issue's baseline index market value, with the band rebalance occurring with a one-month lag.
<b>Green bond treatment</b>	If an instrument is categorized as a "green bond" by the Climate Bonds Initiative, the security will receive a one-band upgrade. Green bonds by issuers already in Band 1 will not receive any further upgrades.
<b>JESG Ethical exclusions &amp; Negative Screening</b>	Issuers are excluded based on the below criteria: <ul style="list-style-type: none"> <li>• Issuers not in compliance with UN Global Compact principles as identified by both RepRisk and Sustainalytics</li> <li>• Issuers with JESG scores less than 20 are not eligible for index re-inclusion for 12 months</li> </ul>

Source: JPMorgan Chase & Co

### Additional Custom ESG criteria

Source :	UWV exclusion policy for EMD (local currency)
<b>Exclusions:</b>	<ul style="list-style-type: none"> <li>- <b>Excluded countries – group 1</b> (general country exclusions) <ul style="list-style-type: none"> <li>○ Central African Republic</li> <li>○ Russia</li> <li>○ Myanmar</li> <li>○ Iran</li> <li>○ North Korea</li> <li>○ Lybia</li> <li>○ Somalia</li> <li>○ South Sudan</li> <li>○ Sudan</li> <li>○ Syria</li> <li>○ Zimbabwe</li> <li>○ Lebanon</li> <li>○ Dem. Republic Congo</li> <li>○ Venezuela</li> <li>○ Iraq</li> </ul> </li> <li>- <b>Excluded countries – group 2</b> (Countries included in the annual list of "10 worst countries for workers" by ITUC Global Rights Index, all securities from the country are removed from the index universe - <a href="https://www.ituc-csi.org/">https://www.ituc-csi.org/</a>) <ul style="list-style-type: none"> <li>○ Bangladesh</li> <li>○ Brazil</li> <li>○ China (Jun 30, 2022 onwards)</li> <li>○ Colombia</li> <li>○ Egypt</li> <li>○ Honduras</li> <li>○ India</li> <li>○ Kazakhstan</li> <li>○ The Philippines</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Turkey</li> <li>○ Zimbabwe</li> </ul>
<b>Update frequency and source:</b>	The list of exclusion criteria and excluded countries is provide by Pension Fund UWV and updated annually

## Index Characteristics and Methodology

<b>Pricing:</b>	Bid and Ask prices are taken from a third party pricing source. <sup>3</sup>
<b>Aggregate Return:</b>	Index/Country level total return is calculated as a market-weighted average of bond returns using mid prices.
<b>Rebalancing:</b>	Rebalances on the last weekday of the month. If FX rates from WN Reuters are unavailable on the last weekday of the month (i.e. Good Friday), indices are rebalanced on the previous business day.
<b>Coupon Treatment:</b>	All coupons received are immediately reinvested into the index
<b>FX Rates:</b>	All FX rates used for hedged/unhedged returns are as of 4pm London time provided by WM/Reuters
<b>Credit Rating:</b>	Lowest of S&P/Moody's/Fitch Rating. (Baa2/BBB/BBB as of Dec 31, 2016)
<b>Weighting:</b>	Diversified, market capitalization based weighting subject to maximum weight of 15% (cap) per country.

Source: JPMorgan Chase & Co.

## Appendix

### Defining the universe of GBI-EM instruments

The J.P. Morgan ESG GBI-EM UWV Workers' Rights Customized Index consists of regularly traded, fixed-rate, domestic currency government bonds which international investors can readily access. The index excludes countries where local market investing is subject to explicit capital controls, but eligibility consideration does not factor in regulatory/tax hurdles.

Eligibility for local currency issues is determined using the following criteria:

#### Instrument type

The J.P. Morgan ESG GBI-EM UWV Workers' Rights Customized Index only includes fixed coupon instruments. Floating-rate and capitalizing/amortizing bonds are not eligible for index inclusion. Additionally, bonds with callable, puttable or convertible features are not part of the indices.

#### Liquidity

A key feature that distinguishes our indices from other index products is the strict enforcement of liquidity criteria in the selection of instruments. Yet, while the notion of liquidity differs from market to market, J.P. Morgan indices include only securities, subject to several considerations including but not limited to:

- *Pricing:* Bonds must trade with enough frequency to prevent stale price quotations.
- *Availability:* Bonds must be regularly traded in size at acceptable bid-offer spreads and readily redeemable for cash. A reasonable two-way market must exist for the instrument to be included in the index portfolio.
- *Replication costs:* Investors should be able to replicate the index without incurring excessive transaction costs.

## Weighting Methodology

The J.P. Morgan ESG GBI-EM Global Diversified UWV Workers' Rights Customized Index limits the weights of those index countries with larger debt stocks by only including a specified portion of these countries' eligible current face amounts of debt outstanding. The index is geared toward managers who want maximum diversification or those who face limitations on the amount of portfolio exposure they can take to individual issuers. Once these instrument allocations are derived for each country, the current settlement price for each instrument is applied to its index allocation to calculate the market capitalization of each issue in the index. The weight of each instrument in the index is then determined by dividing its market capitalization by the total market capitalization for all of the index's instrument allocations. The result represents the weight of each issue expressed as a percentage of the index. By allocating their portfolios according to these exact instrument weights, and accounting for coupon reinvestments and instrument allocation changes, investors can replicate the performance of the J.P. Morgan ESG GBI-EM Global Diversified UWV Workers' Rights Customized Index.

The underlying J.P. Morgan ESG GBI-EM Global Diversified UWV Workers' Rights Customized Index diversification methodology anchors on the average size of the countries in the index and the debt stock size of the largest country in the index.

We define **Index Country Average (ICA)**  $\Sigma(\text{Ctry Face Amount}) / \text{No. of Countries in the index}$  Based on the ICA, the diversified face amount for any country in the index is derived according to the following rules:

1. The largest country based on face amount will be capped at double the average country debt stock in the index ( $\text{ICA} * 2$ ). This is the maximum threshold and sets the scale to determine the diversified face amounts of other countries in the index.
2. If a country's debt stock is below the index country average (ICA), the entire amount will be eligible for inclusion.
3. Countries whose debt stock falls between the index country average (ICA) and double the average ( $\text{ICA} * 2$ ) will be linearly interpolated.

Subsequently, the diversified (adjusted) face amount determined using the above step is then converted to a market value (based on dirty price), which is then converted to an index weight percentage based on the proportion of the total index market capitalization that the country represents. Any excess weight above the cap will be redistributed to smaller countries that are below the cap to limit concentration risk.

Diversified Country Face Amount=

$$\begin{cases} \text{ICA} * 2 & , \text{if } \text{FA}_{max} \\ \text{ICA} + \frac{\text{ICA}}{\text{FA}_{max} - \text{ICA}} * (\text{Ctry FA} - \text{ICA}) & , \text{if } \text{Ctry FA} > \text{ICA} \\ \text{Ctry FA} & , \text{if } \text{Ctry FA} \leq \text{ICA} \end{cases}$$

where Ctry FA represents the non-diversified country face amount and  $\text{FA}_{max}$  represent the Face Amount of the Largest Country.

For any questions or for additional information, please contact [index.research@jpmorgan.com](mailto:index.research@jpmorgan.com)

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